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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/822,993

04/13/2004

Shunji Watanabe

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04/14/2006

ADAMS & WILKS
17 BATTERY PLACE
SUITE 1231
NEW YORK, NY 10004

EXAMINER

PARSONS, THOMAS H

ART UNIT

PAPER NUMBER

1745

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/822,993

Applicant(s)

WATANABE ET AL.

Examiner

Thomas H. Parsons

Art Unit

1745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-12 is/are allowed.
- 6) ☒ Claim(s) 1,2,13 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 24 April 2003. It is noted, however, that applicant has not filed a certified copy (Japan 2003-119453) of the Japanese application as required by 35 U.S.C. 119(b).

Information Disclosure Statement

2. The listing of references in the specification (see page 3, lines 8-9) is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Specification

3. The disclosure is objected to because of the following informalities:
Page 2, line 23, suggest changing "ay" by --by--.
Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

5. Claims 1-2 and 13-14 are rejected under 35 U.S.C. 102(a) as being anticipated by Applicants' Prior Art Figure 2.

Claim 1: The Applicants' Prior Art Figure 2 discloses an electrochemical cell **capable of reflow soldering** comprising a negative pole can (105), a positive pole can (103), and a terminal (110) fixed to the negative pole can (105), wherein the electrochemical cell is connected to a circuit board (111) at the terminal (110) and at the positive pole can (103) via terminal 104.

The transitional phrase "comprising" has been construed as open-ended language, which does not preclude having a terminal connected to the positive pole can for connection to a circuit board.

Claim 2: Applicants' Prior Art Figure 2 discloses an electrochemical cell **capable of reflow soldering** comprising a negative pole can (105), a positive pole can (103), and a terminal (104) fixed to the positive pole can (103), wherein the electrochemical cell is connected to a circuit board (111) at the terminal (104) and at the negative pole can (105) via terminal 110.

The transitional phrase "comprising" has been construed as open-ended language which does not preclude having a terminal connected to the negative pole can for connection to a circuit board.

The recitation “capable of reflow soldering” has been construed as function language that adds no additional structure to the electrochemical element. However, because the electrochemical element of the Applicants’ Prior Art Figure 2 is the same as that instantly claimed, it anticipated being “capable of reflow soldering”.

Claims 13 and 14: Applicants’ Prior Art Figure 2 discloses an electrochemical cell the terminal (104) mounted on the positive pole can (103) is bent to have a step of height which is larger than the mounted height of the electrochemical cell.

Allowable Subject Matter

6. Claims 2-12 are allowable over the prior art references of record.

Reasons for Indicating Allowable Subject Matter

7. The following is a statement of reasons for the indication of allowable subject matter:

The claimed invention is directed towards an electrochemical cell capable of reflow soldering comprising a terminal fixed to either the negative pole can or the positive pole can, and at least one of the group consisting of Au layer, Sn layer, Sn-alloy layer and Ni layer which is provided on the bottom surface of the can to which the terminal is not connected.

JP2003-168857 in Figure 1 discloses an electrochemical cell capable of reflow soldering comprising a pair of terminals each of which is fixed to both the negative pole can or the positive pole can, and at least one of the group consisting of Sn-alloy layer which is provided on the

Art Unit: 1745

bottom surface of each electrode (i.e. on the surface between each terminal and the circuit board). There is not teaching or suggestion to provide the claimed layer on the bottom surface of the can to which no terminal is located.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas H. Parsons whose telephone number is (571) 272-1290. The examiner can normally be reached on M-F (7:00-4:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


PATRICK JOSEPH RYAN
SUPERVISORY PATENT EXAMINER

Thomas H Parsons
Examiner
Art Unit 1745
